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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,659	09/23/2003	Tsung I. Yu	YUTS3012/EM	9111
23364	7590	12/15/2004	EXAMINER	
BACON & THOMAS, PLLC 625 SLATERS LANE FOURTH FLOOR ALEXANDRIA, VA 22314			ALTER, ALYSSA M	
			ART UNIT	PAPER NUMBER
			3762	

DATE MAILED: 12/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/667,659

Applicant(s)

YU, TSUNG I.

Examiner

Alyssa M Alter

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09/23/03 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claims 1-16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the claiming of structures being in contact with or implanted within the body amounts to an inferential recitation of the body, which renders these claims non-statutory. The examiner recommends changing "in contact" in claim 1, line 19 to --adapted to be in contact--.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 12-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 12, "for at least one conductive pin to be inserted into", the conductive pins are not actively claimed, but are merely stated for intended use. Therefore, further specification of the pins structure is not relevant to the claimed invention.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2, 5-7 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unsworth et al. (US 6,615,080) in view of Post et al.(6,210,771). Unsworth et al. discloses the claimed invention except for the conductive buttons and conductive strips of electrically conductive cloths. Post et al. teaches that it is known to substitute fasteners of known functional equivalents as set forth at column 2, lines 42-46. Post et al. also teaches the use of electrically active textiles. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the standard plug connectors and conductors as taught by Unsworth et al. with conductive buttons and electrically conductive cloths as taught by Post et al., in order to reduce the probability that one of the connectors could become unplugged from the electrical stimulation device and to embed the conductors into the footwear without inserting bulky conduction wires.

As to claim 1, the examiner considers the upper surface of the shoe to be the ankle area of the footwear and top of the foot, and lower surface to be the sole of the footwear with the electrodes or conductive plates. Also, since the term "high voltage" in is a relative term, since the electrical stimulation device operates at a high current output {See Reference U}, it is deemed to have high voltage.

As to claim 5, since the electrodes are disposed on the sole of the foot, they are deemed to be are in contact with acupuncture points of the feet.

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As to claim 10, Unsworth et al. discloses in column 6, lines 15-19 that mild contraction of the foot muscles can be “accomplished by only stimulating the soles of the feet. The surface electrodes were placed over intrinsic muscles on the plantar surface of the foot, or proximal to them, for example on or around the ball of the foot, and over or proximal to the heel”. Since only the soles of the feet are supposed to be stimulated, the fabric of the footwear is deemed to be non-conductive.

As to claim 2, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the electrical stimulation unit as taught by the modified Unsworth et al. with a plurality of buttons, because Applicant has not disclosed that the plurality of buttons provides an advantage, is used for a particular purpose, or solves a stated problem. One of ordinary skill in the art, furthermore, would have expected the Applicant's invention to perform equally well with the knobs of the Focus<sup>TM</sup> by Empi Inc. {See Reference U} as taught Unsworth et al. in column 5, lines 51-52, because both can modify the stimulation parameters.

Therefore, it would have been an obvious matter of design choice to modify the adjustable control unit to obtain the invention as specified in the claim(s).

As to claim 6, it would have been an obvious matter of design choice to a person of ordinary skill in the art to modify the separate electrical stimulation unit as taught by the modified Unsworth et al. with a connection port in order to allow the two shoes to be dependant on one electrical stimulation unit, because Applicant has not disclosed that the plurality of buttons provides an advantage, is used for a particular purpose, or solve a stated problem. One of ordinary skill in the art, furthermore, would have expected the

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Applicant's invention to perform equally well with two separate electrical stimulation units as taught by Unsworth et al., because both configurations provide the shoes with electrical stimulation.

Therefore, it would have been an obvious matter of design choice to modify the adjustable control unit to obtain the invention as specified in the claim(s).

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Unsworth et al. as applied to claims 1, 5, 7 and 9-11 above in further view of Wang (US 6,021,353). The modified Unsworth et al. discloses the claimed invention except for the LCD panel. LCD's are notorious in the art for displaying stimulation parameters. For example, Wang teaches that it is known to use an LCD as set forth in Figure 3, reference number 83 in the same field of endeavor. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the electrical stimulation device as taught by the modified Unsworth with an LCD as taught by Wang, in order to display the treatment parameters and status to the user.

4. Claims 4 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Unsworth et al. as applied to claims 1, 5, 7 and 9-11 above in further view of Maida (US 6,151,528). The modified Unsworth et al. discloses the claimed invention except for the step switch. Maida teaches that it is known to use a switch to select different areas to stimulate, set forth in column 4, lines 46-48. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the two connectors in the electrical stimulation device as taught by the modified

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Unsworth with the switch as taught by Maida, in order to regulate which section of the sole is stimulated in order to get a treatment that is specific to a patients needs.

6. Claims 12-14 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over the modified Unsworth et al. as applied to claims 1, 5, 7 and 9-11 above in further view of Chan (US Patent Publication 20030004443 A1). The modified Unsworth et al. discloses the claimed invention with a shoe pad having a plurality of holes, since the fabric used is porous (col. 8, lines 11-12).

In the alternative, if it is not agreed that the porosity can be read as holes, Chan teaches the used of a board with massage grains for massaging the soles of the feet. Since Chan discloses that the massage grains, in figure 2, can be made of magnets and/or metal on page 1, paragraph 13, the examiner considers the massage grains to be conductive. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the footwear soles as taught by the modified Unsworth with holes and massage grains as taught by Chan, in order to specifically target individual acupressure points and modify the treatment to a patients needs.

#### ***Allowable Subject Matter***

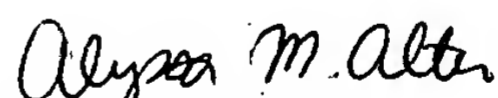
1. Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alyssa M Alter whose telephone number is (571) 272-4939. The examiner can normally be reached on M-F 9am to 4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Alyssa M Alter  
Examiner  
Art Unit 3762

  
JEFFREY R. JASTRZAB  
PRIMARY EXAMINER

12/13/04